The general analysis was done by making certain assumptions, then calculating the power density at ground level and finding the percentage of the allowable level. These various contributing percentages were added to get the final percentage of allowable radiation.

It was assumed that if the final percentage was less than 100%, then the addition of the proposed Crozet FM operation operation to the site would present no radiation hazard. As will be demonstrated, the proposed facility constitutes 4.09% of the allowable limit at ground level. Whereas the co-located communication facilities contribution of non-ionizing radiation is negligible, it is believed that the addition of the proposed Crozet FM operation operation to the site would present no radiation hazard.

The area around the base of the proposed antenna tower will be fenced to prevent access to the tower structure when the FM operation is broadcasting. In the event that workers need to enter the restricted area or climb the tower structure, applicant certifies that it will cease operations for the entire period of potential exposure to workers and will only resume operation after verification that all personnel are clear of the restricted area and out of the vicinity of the tower structure.

The following assumptions were made for the analysis of the FM stations at the site:

1. All facilities within 1 km. are considered to be at the same site as the proposed site.

2. All FM stations were considered to be circularly polarized.

3. Worst case downward radiation was used.

4. S, the power density at ground level was calculated using the following formula:

Where:

$$S = \frac{(0.64)\ (1.64)\ (Power)\ (1000)}{(\Pi)(Distance)^2}$$

[redacted]

antenna installation proposed herein will not adversely affect safety in air navigation and that the instant application is exempt from notification to the FAA under 47 CFR 17.14(a).

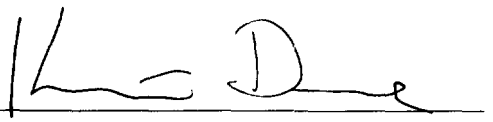
Because there is no increase in tower height proposed, it is believed that the proposed installation would not constitute a major environmental action as defined by the Commission's Rules.

No change in the character of the site is proposed as a part of the construction. No change in grade or land surface is proposed. The site will experience little change in human presence as a result of the proposed construction.

STATEMENT OF INTERFERENCE

The proposed operation is not expected to cause any adverse effect on the existing business band radio operation co-located at the proposed antenna site. Applicant acknowledges its responsibility to correct any problems caused by interference resulting from its proposed operation of Channel 278-A and certifies that it will take full financial responsibility for resolving any interference related problems.

Respectfully Submitted,
Broadcast Technical, Inc.

By: 

Kenneth Devine

May, 1992

FIGURE 1
FM SPACING STUDY
NEW EDUCATIONAL FM STATION
CH 278 A 103.5 MHz. 0.270 kW 462 METERS
COMMUNITY EDUCATIONAL SERVICE COUNCIL, INC.
CROZET, VIRGINIA

REFERENCE
37 57 00 N
78 43 38 W

CLASS A

DISPLAY DATES
SEARCH ***4-30-92***
DATA ***3-26-92***

Current rule spacings

CHANNEL 278 - 103.5 MHz

CALL / TYPE	CH# / LAT	CITY / LNG	STATE / PWR	BEAR' / HT	D-KM / D-Mi	R-KM / R-Mi	MARGIN (KM)
AP278	**278A**	**Crozet**	**VA**	**0.0**	**0.00**	**115.0**	**-115.00***
AP CN	*37 57 00*	*78 43 38*	*0.27 kW*	*462M*	*0.0*	*71.5*	
Board of Visitors of James Madison University BPED911101MA							
Commercial channel operating educational							
ALOPEN	**278A**	**Crozet**	**VA**	**350.4**	**3.94**	**115.0**	
AL N	*37 59 06*	*78 44 05*	*0.0 kW*	*0M*	*2.5*	*71.5*	
90-644							
Site Restricted-Effective 10-15-91-Rsvd commercial channel for educational use							
WMXB	**279B**	**Richmond**	**VA**	**115.8**	**113.00**	**113.0**	**-0.00 ***
LI CY	*37 30 31*	*77 34 37*	*20.0 kW*	*256M*	*70.0*	*70.2*	
Radio Ventures I, L.P. BLH831117BF							
WGMSFM	**278B**	**Washington**	**DC**	**52.5**	**179.84**	**178.0**	**1.84**
LI DCN	*38 56 09*	*77 05 33*	*44.0 kW*	*158M*	*111.8*	*110.6*	
Classical Acquisition Partner BLH910614KA							
AP277	**277A**	**New Market**	**VA**	**348.2**	**74.69**	**72.0**	**2.69**
APG CN	*38 36 31*	*78 54 07*	*2.100.0 kW*	*166M*	*46.4*	*44.8*	
Commonwealth Audio Visual Ent BPH891026MT 900626							
ALOPEN	**277A**	**New Market**	**VA**	**1.0**	**75.86**	**72.0**	**3.86**
AL N	*38 38 00*	*78 42 42*	*0.0 kW*	*0M*	*47.2*	*44.8*	
88-520 WO= 890926 891026							

*** Distance to WMXB is rounded to nearest kilometer as per FCC Rules**

PREPARED BY:

BROADCAST TECHNICAL, INC.
NEW ORLEANS, LOUISIANA
May, 1992

FIGURE 1, Page 2
FM SPACING STUDY
NEW EDUCATIONAL FM STATION
CH 278 A 103.5 MHz. 0.270 kW 462 METERS
COMMUNITY EDUCATIONAL SERVICE COUNCIL, INC.
CROZET, VIRGINIA

REFERENCE		DISPLAY	DATES
37 57 00 N	CLASS A	*SEARCH*	*4-30-92*
78 43 38 W		*DATA*	*3-26-92*

Current rule spacings

CHANNEL 278 - 103.5 MHz

CALL TYPE	CH# LAT	CITY LNG	STATE PWR	BEAR' HT	D-KM D-Mi	R-KM R-Mi	MARGIN (KM)
AP277	**277A**	**New Market**	**VA**	**354.0**	**79.11**	**72.0**	**7.11**
APD CN	*38 39 32*	*78 49 16*	*6.0 kW*	*100M*	*49.2*	*44.8*	
John D. Bomberger BPH891026MC 900626							
Amended 900126-Initial Decision 920309							
WUVA	**224A**	**Charlottesville**	**VA**	**79.8**	**22.00**	**10.0**	**12.00**
LI CN	*37 59 06*	*78 28 51*	*0.22 kW*	*274M*	*13.7*	*6.2*	
WUVA, Inc. BLH790608AC							
WAKG	**277C1**	**Danville**	**VA**	**203.5**	**146.27**	**133.0**	**13.27**
LI CN	*36 44 28*	*79 23 05*	*100.0 kW*	*199M*	*90.9*	*82.7*	
Piedmont Broadcasting Corpora BLH900904KB							

END CHANNEL 278A STUDY

PREPARED BY: BROADCAST TECHNICAL, INC.

NEW ORLEANS, LOUISIANA

May, 1992

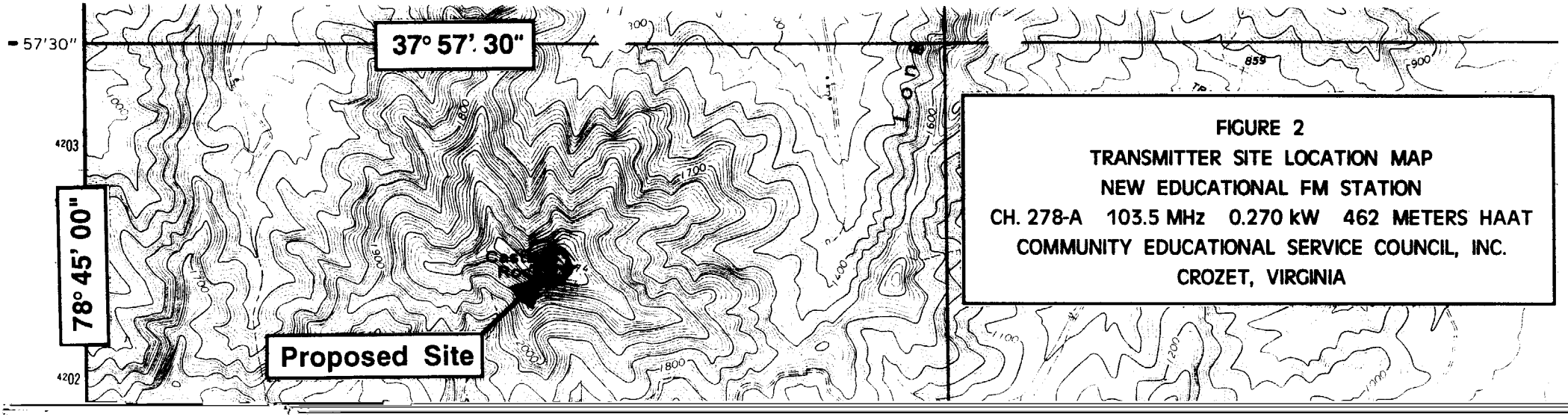
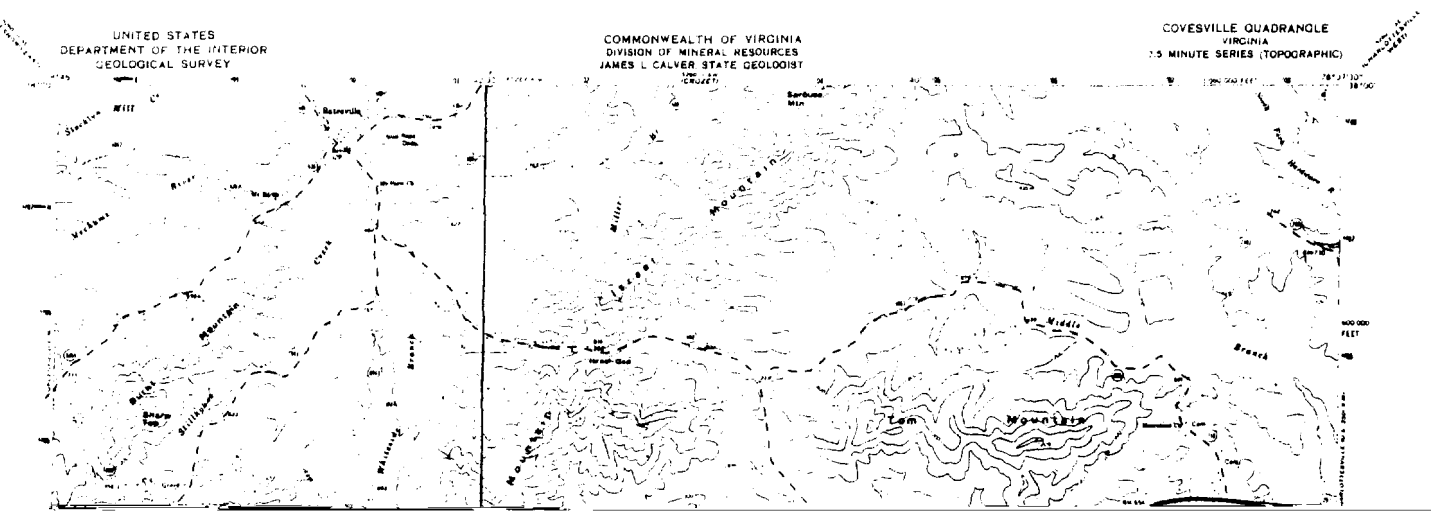
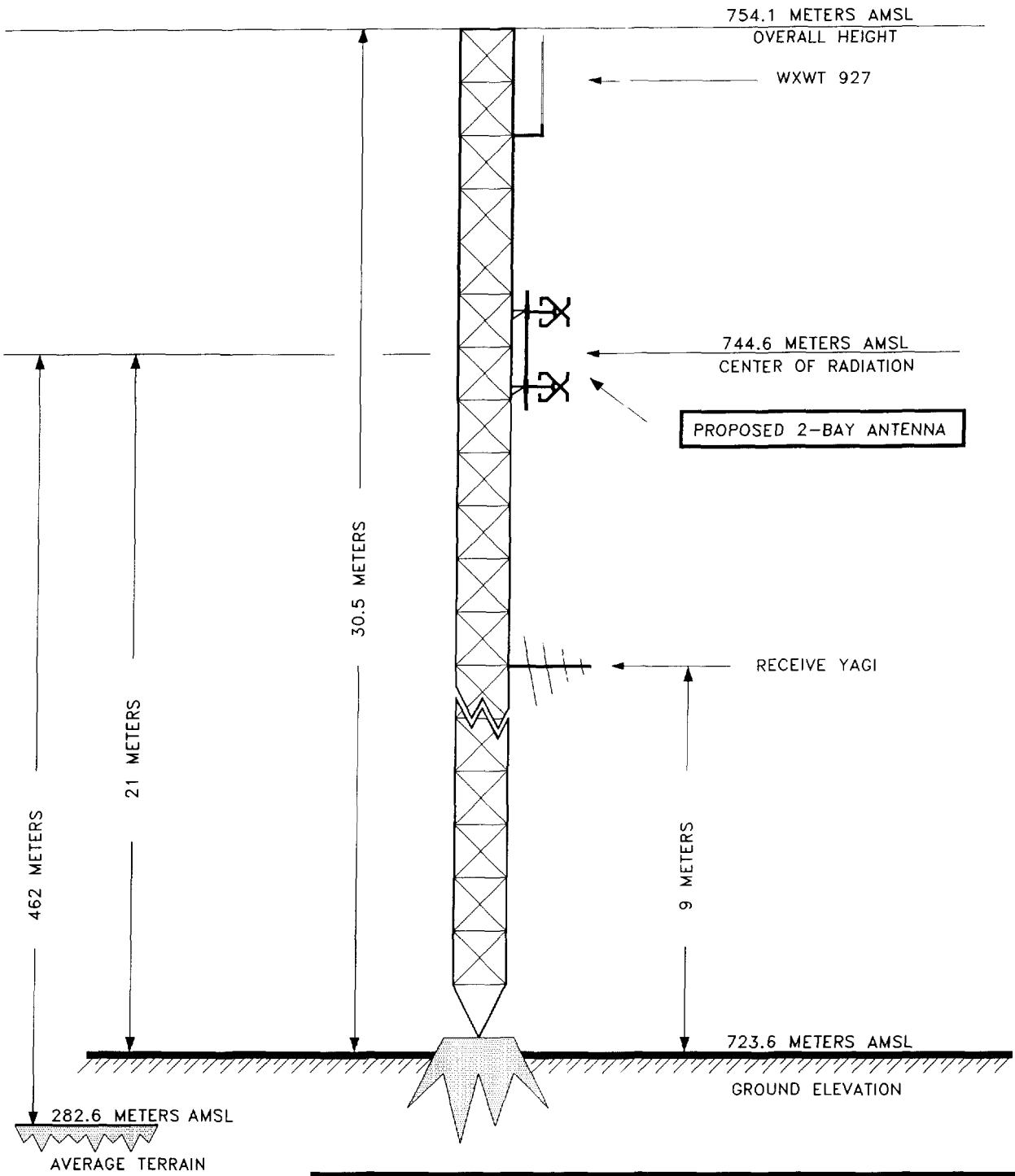


FIGURE 2
TRANSMITTER SITE LOCATION MAP
NEW EDUCATIONAL FM STATION
CH. 278-A 103.5 MHz 0.270 kW 462 METERS HAAT
COMMUNITY EDUCATIONAL SERVICE COUNCIL, INC.
CROZET, VIRGINIA


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
COMMONWEALTH OF VIRGINIA
DIVISION OF MINERAL RESOURCES
JAMES L CALVER STATE GEOLOGIST
COVESVILLE QUADRANGLE
VIRGINIA
7.5 MINUTE SERIES (TOPOGRAPHIC)

N. 37° 57' 00"
W. 78° 43' 38"



Not to Scale:

FIGURE 3
ANTENNA SKETCH
NEW EDUCATIONAL FM STATION
CH.278-A 103.5 MHz 0.270 kW 462 METERS HAAT
COMMUNITY EDUCATIONAL SERVICE COUNCIL, INC.
CROZET, VIRGINIA

FIGURE 4
ELEVATION AND CONTOUR DATA
NEW EDUCATIONAL FM STATION
CH 278 A 103.5 MHz. 0.270 kW 462 METERS
COMMUNITY EDUCATIONAL SERVICE COUNCIL, INC.
CROZET, VIRGINIA

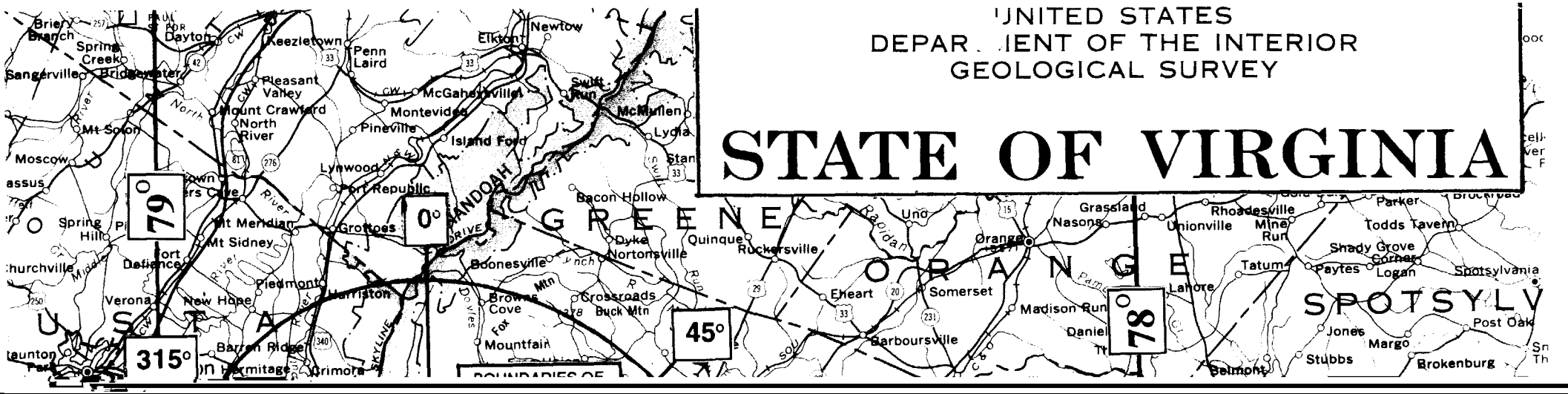
Radial and Bearing (Degrees)	Average Elevation (3-16km) Meters	Effective Antenna Height Meters	Effective Radiated Power (dBk)	Predicted Contours 70 dBu km	60 dBu km
0.0	231.6	513	-5.686	16.8	30.0
45.0	255.6	489	-5.686	16.4	29.2
90.0	206.6	538	-5.686	17.3	30.9
135.0	224.6	520	-5.686	17.0	30.3
180.0	265.6	479	-5.686	16.2	28.8
225.0	342.6	402	-5.686	14.9	26.4
270.0	413.6	331	-5.686	13.6	24.1
315.0	316.6	428	-5.686	15.3	27.2

Height of radiation center above mean sea level	**744.6 meters**
Height of average terrain above mean sea level	**282.6 meters**
Height of radiation center above average terrain	**462.0 meters**

PREPARED BY: **BROADCAST TECHNICAL, INC.**

NEW ORLEANS, LOUISIANA

May, 1992



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF VIRGINIA